Montana Department of Agriculture

The Department of Agriculture, through the Director, is responsible for administration of a $13 million annual budget with 108 employees. The Director oversees the department's three divisions and six bureaus. The function of each division is summarized below.

Central Management Division performs technical, fiscal and administrative support functions for the department. Responsibilities of the division include activities for internal operations of the department.

Agricultural Sciences Division is responsible for the registration of 7,025 pesticide products; the training, certification and licensing of 1,510 commercial and government applicators, 1,677 operators, 447 pesticide dealers, and 8,200 private applicators.

The division provides evaluation of pest management problems and programs; training and licensing of government and commercial pesticide applicators and dealers; and analytical laboratory and consultative services to other agencies and the public. In addition, the division is responsible for the administration and enforcement of regulatory laws controlling the production, manufacturing, and marketing of agricultural commodities exported from or distributed within Montana. The division investigates consumer complaints; performs technical expertise and licenses for 480 nurseries, 656 feed dealers, 234 fertilizer dealers, 320 seed dealers and 105 grain merchandisers. The division also registers 2,698 pet food products, 1,200 fertilizers, and 5,030 bee yards.

The passage of the Montana Agricultural Chemical Ground Water Protection Act (1990) charges the department to protect ground water and the environment from impairment or degradation due to the use of agricultural chemicals. The Vertebrate Pest Management program provides on-site demonstrations, educational materials and technical bulletins to assist producers in reducing damage caused by field rodents, birds and other large mammals. The Weed Management program is responsible for administering statewide efforts aimed at control and/or eradication of noxious and other undesirable weeds. The Noxious Weed Seed Free Forage Program provides a certification mechanism that allows producers to market various forage crops as being noxious weed seed free.

The **Agricultural Development Division** (ADD) is responsible for administering programs directed at promoting and enhancing Montana agriculture. Within the Division are four bureaus, the Rural Development Bureau, the Wheat and Barley Bureau, the Agriculture Marketing and Business Development Bureau, and the Montana State Grain Laboratory Bureau.

Councils and Boards attached to the Agriculture Development Division include the Montana Alfalfa Seed Committee, Agriculture Development Council, Montana Potato Advisory Committee, Wheat and Barley Committee, State Hail Insurance Board, and Agriculture in Montana Schools.

Statewide agricultural statistics and projections are developed through a Federal/State cooperative agreement with the National Agriculture Statistics Service administered through the division. This information is made available through a comprehensive agricultural statistics bulletin and grain movement summary along with other production, price and income reports.

The **Rural Development Bureau** serves Montana through the Agriculture Finance Program, the Commodity Check-Off Enabling Act, the State Hail Insurance Program, and Montana Agricultural Statistics Service. The Bureau is charged with assisting producers and entrepreneurs in enhancing our agricultural industry and the Montana economy.

The Agriculture Finance program is responsible for making grants and lower interest rate loans for rural youth, rural youth organizations, and other qualified farmers and ranchers. The Agriculture Finance Program also provides funds for Rural Community Development Grants, Building Our American Communities, and the Young Ag Couples Conference.

The State Hail Insurance Program insures any crop grown in Montana from losses caused by hail damage. The Program was established in 1917 to provide producers with basic hail insurance coverage to protect producers input costs.

The **Agriculture Marketing and Business Development Bureau** is responsible for market enhancement and development through direct market development activities, grants, and seed capital loan investments in new and innovative products or process, marketing, and product development. Marketing and agri-business development personnel work closely with individuals and organizations to promote and enhance our agriculture industry.

The **Montana State Grain Laboratory Bureau** is located in Great Falls and operates the only official USDA-Federal Grain Inspection Service grain grading and inspection laboratory in the state of Montana. The lab provides unbiased grain inspection, grading, analytical services, and oil seed analysis to the state's grain industry.

The **Montana Wheat and Barley Bureau** is responsible for marketing, promoting and encouraging intensive scientific and practical research in all phases of wheat and barley culture and production under the guidelines and policies developed by the Wheat and Barley Committee.

Crop, Livestock, and Weather Digest, 2004

January: During January, Montana had sub-zero temperatures and snowfall in most areas. Kalispell received the most precipitation at 1.97 inches. Snow cover provided good protection and moisture for the winter wheat crop. At month's end, winter wheat conditions were rated mostly fair to good. Livestock grazing was reported at 16% open, compared to 81% open last year. Calving and lambing had just begun by the end of the month.

February: Montana had normal temperatures for the month and below normal snowfall in most areas. Ekalaka and Hardin received the most precipitation at 1.25 inches each. Ample snow cover provided protection for the winter wheat crop. At month's end, winter wheat conditions were rated mostly fair to good. Livestock producers reported only 28% of the pastures open for grazing at the end of February. One hundred percent of both cattle and calves and sheep and lambs were receiving supplemental feed. Calving and lambing were 20% and 10% complete, respectively.

March: Montana's weather was warm and dry in March. The winter wheat crop was mostly in good to fair condition at month's end. Mild weather allowed farmers to start seeding spring grains. Grazing was reported 60% open at the end of the month, compared to 72% open last year. One hundred percent of both cattle and calves and sheep and lambs continued to receive supplemental feed. Calving and lambing were 52% and 39% complete, respectively.

April: Montana received scattered rain throughout the state during the month. Winter wheat conditions were below the five-year average at month's end due to lack of moisture and winter kill. Warm and mostly dry weather allowed producers to make good seeding progress with spring crops. By the end of the month, livestock grazing was 80% open. Due to dry range and pasture conditions, 66% of the cattle and calves and 58% of the sheep and lambs were receiving supplemental feed. Calving and lambing were nearing completion.

May: Warm, dry weather continued until the second week in May when much needed rain and snow fell throughout the state. Precipitation and lower temperatures prevailed the rest of the month. Turner received the most precipitation for May at 2.92 inches. As a result of wet, cool conditions, spring planting and crop progress slowed down. Some producers in eastern Montana had to replant their sugar beets because of a hard freeze. At month's end, 55% of the cattle and calves and 60% of the sheep and lambs had been moved to summer pastures.

June: The weather was warm and dry the first week in June. Rain showers fell across the state the rest of the month. Bozeman received the most precipitation at 2.61 inches. The widespread moisture and cooler temperatures improved crop conditions for almost all small grains but slowed crop progress. At month's end, nearly all the cattle and calves and sheep and lambs were moved to summer ranges. Range and pasture feed conditions improved slightly with the precipitation but were still behind last year and the five-year average at the end of the month.

July: Hot, dry weather prevailed across Montana in July. Miles City set the high at 107 degrees. Winter wheat was 11% harvested at the end of the month, significantly behind last year and the 5-year average. The first cutting of alfalfa hay was nearly complete, and the second cutting was underway by the end of the month. In response to the summer weather, range and pasture feed conditions declined.

August: Most of the state received significant rainfall the first part of the month. Baker received the most precipitation at 2.92 inches. Conditions turned mild and dry at mid-month, which helped crop development. Rainfall across the state during the rest of the month, along with cooler temperatures, slowed the spring grain harvest. At month's end, the spring wheat, durum wheat, barley, and oats harvest progress was well behind last year. Winter wheat was 95% harvested. Range and pasture feed conditions improved slightly with the rain.

September: During the first part of the month, limited rainfall, warmer temperatures, and a relatively dry week allowed producers to speed up spring grains harvest. Rain showers fell across the state the rest of the month. West Glacier received the most precipitation at 2.11 inches. Farmers took advantage of the good soil moisture conditions to plant winter wheat. By month's end, winter wheat was 86% seeded, ahead of last year and the 5-year average. Spring grain harvest was nearing completion, except for durum wheat, which was 68% harvested. At the end of the month, 45% of the cattle and calves and 51% of the sheep and lambs had been moved from summer ranges.

October: Montana had warm temperatures and limited precipitation the first half of the month. During the third week, the weather was cooler and rain fell in most areas of the state. As a result, the 2005 winter wheat crop condition was rated 75% good to excellent. At month's end, durum wheat was 95% harvested, compared to 100% harvested last year. Dry beans, sugar beets, and potato harvest came to a close. By the end of the month, 75% of the cattle and calves and 83% of the sheep and lambs were moved off summer ranges.

November: Temperatures were above normal for the month with limited precipitation throughout the state. By the end of the month, 98% of the winter wheat crop was emerged and 78% was rated in good to excellent condition. At the end of the month, 48% of the cattle and calves and 41% of the sheep and lambs received supplemental feed, fewer than last year.

December: Montana had above normal temperatures until the last week of December when colder temperatures and snow arrived. At month's end, the winter wheat crop had very little freeze or wind damage and 65% of the crop was rated in good to excellent condition. At the end of the month, 82% of the cattle and calves and 84% of the sheep and lambs were receiving supplemental feed, compared with last year when 100% of both cattle and calves and sheep and lambs received supplemental feed.

Climatological Data Annual and Growing Season Precipitation and Frost-Free Days, 2003-2004

STATIONS	COUNTY	PRECIPITATION in Inches						FROST FREE DAYS 1/		
		Annual			April – September			Growing Season		
		2003	2004	Normal 2/	2003	2004	Normal 2/	2003	2004	Average 3/
Bigfork 13 S	Lake	16.96	24.54	21.87	9.35	15.32	12.47	158	166	152
Big Sandy	Chouteau	13.39	11.63	13.82	8.43	8.15	10.54	124	--	97
Big Timber	Sweet Grass	16.63	12.94	16.11	.9.29	8.09	11.25	117	131	126
Billings WSO	Yellowstone	12.18	11.08	14.77	6.21	7.96	9.58	121	141	150
Bozeman MSU	Gallatin	19.34	18.56	19.29	9.95	12.76	12.85	78	118	120
Broadus	Powder River	14.22	10.84	13.59	9.03	7.73	9.49	133	141	119
Butte	Silver Bow	9.67	11.14	12.78	7.00	9.76	9.03	82	79	73
Chester	Liberty	8.62	9.68	10.58	6.42	7.76	8.20	117	137	108
Chinook	Blaine	12.87	13.44	13.06	8.88	10.81	10.00	121	119	119
Circle	McCone	16.04	8.24	13.28	10.51	5.41	10.06	125	95	120
Columbus	Stillwater	12.12	12.77	15.67	6.41	8.14	10.56	116	119	125
Conrad	Pondera	12.00	--	12.06	8.44	--	9.12	120	119	93
Culbertson	Roosevelt	16.12	14.88	13.58	11.75	11.42	10.90	122	81	117
Cut Bank	Glacier	5.00	7.65	12.51	4.25	6.58	10.07	83	94	113
Dillon WMCE	Beaverhead	8.37	9.48	11.65	6.12	7.63	8.78	83	96	103
Ekalaka	Carter	18.34	11.72	17.25	11.69	7.41	12.39	121	105	123
Fairfield	Teton	9.05	13.71	12.50	6.83	11.13	9.85	122	131	133
Flatwillow 4 ENE	Petroleum	12.92	10.29	13.30	7.26	7.77	9.84	121	95	118
Forsyth	Rosebud	16.64	12.43	14.08	8.51	8.77	9.97	121	129	134
Fort Benton	Chouteau	11.46	13.41	13.69	8.53	10.67	10.04	121	129	131
Geraldine	Chouteau	17.79	14.31	16.04	11.88	11.22	11.58	121	120	125
Glasgow WSO	Valley	10.80	12.47	11.23	8.01	9.52	8.68	121	131	133
Glendive	Dawson	12.06	13.39	13.62	7.57	9.63	10.42	132	140	144
Great Falls Airport	Cascade	10.14	13.97	14.89	8.36	11.75	10.50	120	129	120
Hamilton	Ravalli	13.39	--	13.54	5.18	10.21	7.63	121	106	129
Hardin	Big Horn	10.85	--	12.07	6.95	7.88	8.08	121	136	133
Harlowton	Wheatland	--	9.14	14.08	--	7.43	10.73	--	119	111
Havre City-Cnty AP	Hill	9.81	11.52	11.46	8.55	10.26	8.35	117	130	125
Helena	Lewis & Clark	9.34	12.05	11.32	7.01	10.38	8.19	121	139	121
Hysham 25 SSE	Treasure	16.13	10.89	14.37	9.01	7.06	9.63	121	95	135
Joliet	Carbon	12.20	9.43	15.77	6.23	5.83	10.24	121	118	120
Jordan	Garfield	9.79	--	12.90	7.07	--	9.59	122	--	122
Kalispell	Flathead	12.30	16.39	17.21	6.23	10.27	9.42	134	129	91
Kremlin	Hill	8.63	13.10	12.24	6.56	10.60	9.49	--	--	--
Lewistown FCWOS	Fergus	13.86	12.08	17.85	9.27	9.36	12.60	120	118	116
Livingston FCWOS	Park	15.06	13.44	15.73	8.34	9.96	11.26	83	95	105
Malta 7 E	Phillips	12.18	11.61	12.88	9.25	9.06	9.93	118	89	122
Medicine Lake 3 SE	Sheridan	--	--	12.99	--	11.11	10.43	117	82	125
Miles City	Custer	11.01	9.44	13.49	7.15	7.21	9.97	121	129	143
Missoula WSO	Missoula	14.55	15.18	13.82	7.37	11.79	8.09	143	130	117
Opheim 12 SSE	Valley	10.98	12.39	11.94	9.55	10.35	9.89	117	75	110
Plentywood	Sheridan	11.45	10.87	13.15	8.65	9.09	10.39	122	75	116
Plevna	Fallon	13.74	12.97	14.69	9.21	9.39	10.67	125	105	114
Roundup	Musselshell	--	9.97	13.25	--	6.83	9.99	--	119	131
Savage	Richland	13.79	13.93	13.96	8.60	9.85	10.89	122	138	126
Scobey 4 NW	Daniels	11.18	14.78	12.48	8.23	11.03	10.22	66	--	108
Sidney	Richland	--	11.22	14.31	--	7.62	10.84	122	138	125
St. Ignatius	Lake	12.21	15.72	16.54	6.52	12.62	10.34	144	140	131
Stanford	Judith Basin	15.75	12.38	17.13	10.17	9.69	12.69	121	129	109
Sunburst 8E	Toole	11.19	14.90	13.05	7.12	11.47	10.06	120	109	115
Terry 21 NNW	Prairie	13.92	9.5	13.67	9.58	6.21	10.44	122	95	126
Thompson Falls PH	Sanders	17.14	17.57	23.07	4.79	10.10	9.59	120	151	133
Townsend	Broadwater	8.44	12.00	10.67	6.54	10.74	8.20	117	119	120
Valier	Pondera	10.44	9.63	12.22	8.07	8.00	9.91	121	130	117
Vida 6 NE	McCone	--	12.67	13.88	--	9.54	10.46	122	95	119
Virginia City	Madison	13.09	15.66	15.82	7.88	11.90	10.85	78	97	85
Wibaux 2 E	Wibaux	15.04	9.47	14.01	11.50	6.26	11.17	131	74	113
Wilsall 8 ENE	Park	16.10	16.98	20.96	9.41	12.22	14.40	76	79	95
Wisdom	Beaverhead	12.39	13.64	11.90	5.94	11.11	7.85	8	17	18
Wyola 1 SW	Big Horn	12.76	13.47	16.89	8.16	10.07	11.03	--	111	115

1/ The number of days between the last frost (32 degrees) in spring and first frost (32 degrees) after June 30.
2/ Normal for period 1971 -- 2000.
3/ Average frost-free days for the period 1991 to 2000.
-- Not available
SOURCE: National Climatic Data Center, NOAA, Asheville, North Carolina.

Freeze/Frost Occurrence Data, Average, 1961-1990 1/

Station	County	Temp. Threshold (degrees F)	Spring (Date) Probability Level			Fall (Date) Probability Level			Freeze-Free Period Probability Level		
			90	50	10	10	50	90	10	50	90
Belgrade AP	Gallatin	36	May 29	Jun 20	Jul 12	Aug 20	Sep 04	Sep 19	102	75	48
		32	May 09	Jun 03	Jun 27	Aug 28	Sep 12	Sep 27	133	101	69
		28	Apr 24	May 09	May 24	Sep 08	Sep 23	Oct 09	159	137	114
Big Sandy	Chouteau	36	May 21	Jun 08	Jun 26	Aug 19	Sep 04	Sep 19	113	87	61
		32	May 07	May 25	Jun 12	Sep 01	Sep 14	Sep 28	133	112	90
		28	Apr 22	May 09	May 25	Sep 09	Sep 24	Oct 09	157	138	119
Big Timber	Sweet Grass	36	May 15	Jun 05	Jun 26	Aug 25	Sep 09	Sep 24	125	95	65
		32	May 02	May 18	Jun 03	Sep 04	Sep 20	Oct 06	149	124	99
		28	Apr 19	May 01	May 12	Sep 15	Oct 02	Oct 20	175	154	132
Bigfork13 S	Flathead	36	May 16	Jun 02	Jun 19	Aug 29	Sep 17	Oct 06	134	106	78
		32	Apr 30	May 16	May 31	Sep 11	Sep 29	Oct 17	159	136	113
		28	Apr 05	Apr 24	May 12	Sep 22	Oct 14	Nov 06	205	173	141
Billings Water Plant	Yellowstone	36	May 11	May 26	Jun 10	Sep 01	Sep 14	Sep 28	133	111	89
		32	Apr 25	May 12	May 29	Sep 06	Sep 23	Oct 10	156	133	110
		28	Apr 18	Apr 30	May 12	Sep 18	Oct 04	Oct 21	178	157	135
Bridger	Carbon	36	May 12	Jun 05	Jun 28	Aug 27	Sep 10	Sep 23	125	97	68
		32	Apr 27	May 16	Jun 04	Sep 06	Sep 20	Oct 05	151	127	102
		28	Apr 17	May 02	May 17	Sep 18	Oct 03	Oct 18	173	153	134
Broadus	Powder River	36	May 10	May 31	Jun 22	Aug 20	Sep 05	Sep 21	123	96	69
		32	May 01	May 19	Jun 07	Aug 31	Sep 14	Sep 28	140	117	94
		28	Apr 20	May 06	May 21	Sep 10	Sep 24	Oct 08	158	140	122
Chester	Liberty	36	May 30	Jun 23	Jul 17	Aug 12	Aug 27	Sep 12	92	64	37
		32	May 17	Jun 06	Jun 26	Aug 27	Sep 08	Sep 21	118	94	70
		28	Apr 29	May 15	Jun 01	Sep 03	Sep 17	Oct 01	145	124	103
Chinook	Blaine	36	May 16	Jun 02	Jun 19	Aug 22	Sep 06	Sep 22	116	96	77
		32	May 03	May 16	May 29	Sep 03	Sep 16	Sep 29	140	122	104
		28	Apr 18	May 04	May 20	Sep 09	Sep 23	Oct 08	162	142	122
Conrad Airport	Pondera	36	May 30	Jun 19	July 09	Aug 17	Sep 02	Sep 19	103	75	47
		32	May 12	May 27	Jun 12	Aug 28	Sep 14	Sep 30	133	109	84
		28	Apr 30	May 13	May 25	Sep 07	Sep 23	Oct 09	151	132	113
Culbertson	Roosevelt	36	May 20	Jun 08	Jun 27	Aug 10	Aug 28	Sep 15	107	80	53
		32	May 06	May 22	Jun 07	Aug 27	Sep 10	Sep 25	134	110	87
		28	Apr 26	May 14	May 31	Sep 06	Sep 19	Oct 01	149	128	106
Dillon WMCE	Beaverhead	36	Jun 11	Jun 30	Jul 18	Aug 15	Aug 27	Sep 09	82	58	34
		32	May 17	Jun 08	Jun 30	Aug 25	Sep 07	Sep 20	115	91	67
		28	May 02	May 18	Jun 03	Sep 03	Sep 18	Oct 03	142	122	103
Ekalaka	Carter	36	May 17	Jun 07	Jun 27	Aug 17	Sep 03	Sep 19	113	87	61
		32	May 11	May 26	Jun 10	Aug 30	Sep 15	Oct 01	133	112	90
		28	Apr 19	May 09	May 29	Sep 07	Sep 25	Oct 13	160	138	115
Fairfield	Teton	36	May 23	Jun 09	Jun 26	Aug 28	Sep 09	Sep 21	111	91	71
		32	May 07	May 20	Jun 03	Sep 04	Sep 20	Oct 07	146	122	99
		28	Apr 23	May 06	May 19	Sep 15	Oct 03	Oct 21	172	149	126
Fort Benton	Chouteau	36	May 17	Jun 08	Jun 29	Aug 26	Sep 07	Sep 20	114	91	68
		32	May 09	May 21	Jun 03	Sep 02	Sep 14	Sep 25	132	114	97
		28	Apr 24	May 07	May 20	Sep 08	Sep 24	Oct 10	160	139	119
Geraldine	Chouteau	36	May 23	Jun 17	Jul 12	Aug 19	Sep 03	Sep 19	111	78	45
		32	May 06	May 24	Jun 11	Sep 03	Sep 14	Sep 24	133	112	90
		28	Apr 28	May 10	May 22	Sep 06	Sep 23	Oct 09	154	135	117
Glendive	Dawson	36	May 01	May 14	May 28	Sep 04	Sep 18	Oct 02	144	126	107
		32	Apr 21	May 05	May 19	Sep 10	Sep 27	Oct 14	168	145	121
		28	Apr 14	Apr 27	May 09	Sep 21	Oct 06	Oct 21	181	162	142
Hamilton	Ravalli	36	May 20	Jun 07	Jun 25	Aug 25	Sep 05	Sep 16	110	89	68
		32	May 06	May 24	Jun 12	Sep 06	Sep 20	Oct 03	143	117	92
		28	Apr 19	May 04	May 19	Sep 17	Oct 03	Oct 20	175	152	128
Hardin	Big Horn	36	May 09	May 31	Jun 22	Aug 27	Sep 09	Sep 23	125	100	76
		32	Apr 27	May 17	Jun 05	Sep 06	Sep 20	Oct 05	149	126	103
		28	Apr 17	May 01	May 14	Sep 15	Oct 01	Oct 17	170	153	135
Harlem	Blaine	36	May 17	Jun 05	Jun 24	Aug 18	Sep 04	Sep 22	119	91	63
		32	May 06	May 23	Jun 08	Sep 02	Sep 15	Sep 28	137	114	91
		28	Apr 23	May 08	May 24	Sep 09	Sep 24	Oct 08	157	138	118

1/ This table gives the probability of a later date in the spring and an earlier date in the fall of the occurrence of temperatures as cold, or colder, than 36, 32, and 28 degrees Fahrenheit and the probable length of the freeze-free period relative to the same temperature threshold.

SOURCE: National Weather Service, NOAA, Great Falls, Montana.

Freeze/Frost Occurrence Data, Average, 1961-1990 1/

STATION	COUNTY	Temp Threshold (degrees F)	Spring (Date) Probability Level			Fall (Date) Probability Level			Freeze-Free Period Probability Level		
			90	50	10	10	50	90	10	50	90
Harlowton	Wheatland	36	May 27	Jun 18	Jul 10	Aug 17	Aug 29	Sep 10	98	72	45
		32	May 08	May 27	Jun 15	Aug 29	Sep 11	Sep 24	131	106	81
		28	Apr 27	May 15	Jun 03	Sep 06	Sep 22	Oct 07	151	129	106
Helena WSO	Lewis & Clark	36	May 16	Jun 04	Jun 23	Aug 25	Sep 08	Sep 21	120	95	70
		32	May 02	May 18	Jun 02	Sep 02	Sep 18	Oct 03	141	122	104
		28	Apr 16	May 02	May 18	Sep 13	Sep 29	Oct 16	172	149	126
Hysham	Treasure	36	May 12	May 28	Jun 13	Aug 28	Sep 09	Sep 21	122	103	84
		32	Apr 29	May 16	Jun 01	Sep 04	Sep 18	Oct 02	143	124	106
		28	Apr 16	Apr 30	May 14	Sep 15	Oct 02	Oct 18	173	154	135
Jordan	Garfield	36	May 17	Jun 04	Jun 23	Aug 18	Sep 03	Sep 19	115	90	65
		32	May 03	May 19	Jun 03	Aug 31	Sep 14	Sep 27	136	117	99
		28	Apr 23	May 05	May 17	Sep 08	Sep 23	Oct 09	157	140	124
Kalispell	Flathead	36	May 20	Jun 12	Jul 05	Aug 26	Sep 07	Sep 19	116	87	57
		32	Apr 30	May 20	Jun 10	Sep 07	Sep 20	Oct 03	148	122	96
		28	Apr 11	Apr 28	May 15	Sep 15	Oct 02	Oct 19	183	157	130
Lewistown FAA AP	Fergus	36	May 22	Jun 15	Jul 10	Aug 20	Sep 03	Sep 17	106	79	51
		32	May 10	May 24	Jun 07	Sep 01	Sep 18	Oct 04	137	116	94
		28	Apr 25	May 10	May 26	Sep 09	Sep 25	Oct 12	156	137	118
Medicine Lake 3 SE	Sheridan	36	May 09	May 28	Jun 16	Aug 18	Sep 05	Sep 23	124	99	74
		32	May 02	May 18	Jun 03	Sep 01	Sep 18	Oct 05	148	123	98
		28	Apr 23	May 11	May 29	Sep 07	Sep 24	Oct 11	160	136	111
Miles City FAA AP	Custer	36	Apr 30	May 16	Jun 01	Sep 05	Sep 21	Oct 08	148	128	107
		32	Apr 22	May 07	May 22	Sep 13	Sep 29	Oct 15	167	145	122
		28	Apr 11	Apr 25	May 09	Sep 27	Oct 12	Oct 27	189	169	149
Plevna	Fallon	36	May 15	Jun 04	Jun 24	Aug 18	Sep 03	Sep 18	113	90	67
		32	May 05	May 21	Jun 06	Aug 26	Sep 14	Oct 03	141	116	90
		28	Apr 25	May 09	May 23	Sep 07	Sep 24	Oct 12	158	137	117
Poplar	Roosevelt	36	May 07	May 24	Jun 10	Aug 31	Sep 12	Sep 25	132	110	89
		32	May 01	May 15	May 29	Sep 07	Sep 20	Oct 03	146	127	108
		28	Apr 20	May 04	May 19	Sep 11	Sep 27	Oct 13	165	145	125
Roundup	Musselshell	36	May 12	May 29	Jun 15	Aug 30	Sep 10	Sep 21	123	103	84
		32	Apr 28	May 14	May 30	Sep 01	Sep 17	Oct 03	144	125	106
		28	Apr 18	May 02	May 15	Sep 14	Sep 29	Oct 14	167	150	133
Scobey	Daniels	36	May 12	May 29	Jun 14	Aug 18	Sep 06	Sep 26	124	100	76
		32	May 02	May 18	Jun 03	Aug 29	Sep 15	Oct 01	141	119	98
		28	Apr 20	May 07	May 24	Sep 06	Sep 26	Oct 15	167	140	114
Sidney	Richland	36	May 10	May 31	Jun 21	Aug 26	Sep 08	Sep 22	122	99	76
		32	May 04	May 17	May 29	Sep 06	Sep 19	Oct 01	142	125	107
		28	Apr 22	May 07	May 21	Sep 12	Sep 26	Oct 09	159	141	124
Stanford 1 WNW	Judith Basin	36	Jun 02	Jun 24	Jul 16	Aug 18	Aug 30	Sep 12	92	66	40
		32	May 16	Jun 03	Jun 20	Aug 28	Sep 11	Sep 24	122	99	76
		28	May 01	May 15	May 29	Sep 08	Sep 23	Oct 08	151	130	109
Terry	Prairie	36	May 09	May 26	Jun 12	Aug 24	Sep 09	Sep 25	125	105	85
		32	Apr 30	May 14	May 28	Sep 06	Sep 18	Sep 30	143	126	109
		28	Apr 19	May 03	May 17	Sep 09	Sep 26	Oct 13	170	146	122
Thompson Falls PH	Sanders	36	May 17	Jun 08	Jun 30	Aug 29	Sep 11	Sep 25	121	94	67
		32	May 01	May 16	Jun 01	Sep 07	Sep 24	Oct 10	154	130	105
		28	Apr 19	May 04	May 19	Sep 17	Oct 07	Oct 27	181	156	131
Townsend	Broadwater	36	May 26	Jun 17	Jul 09	Aug 21	Sep 03	Sep 15	101	77	53
		32	May 12	May 28	Jun 12	Aug 27	Sep 11	Sep 26	128	106	84
		28	Apr 25	May 10	May 24	Sep 07	Sep 24	Oct 11	161	137	112
Vida	McCone	36	May 08	May 21	Jun 04	Aug 28	Sep 12	Sep 27	135	113	91
		32	Apr 28	May 14	May 30	Sep 05	Sep 20	Oct 05	149	129	108
		28	Apr 16	May 03	May 19	Sep 15	Oct 01	Oct 17	170	151	131
Westby	Sheridan	36	May 12	May 27	Jun 12	Aug 18	Sep 05	Sep 23	126	100	74
		32	May 01	May 17	Jun 02	Sep 04	Sep 18	Oct 02	147	123	99
		28	Apr 23	May 07	May 21	Sep 09	Sep 25	Oct 12	160	141	122
Wibaux	Wibaux	36	May 23	Jun 17	Jul 11	Aug 12	Aug 28	Sep 12	100	72	43
		32	May 05	May 23	Jun 09	Aug 21	Sep 08	Sep 26	134	108	81
		28	Apr 25	May 12	May 29	Sep 06	Sep 23	Oct 10	157	133	108

1/ This table gives the probability of a later date in the spring and an earlier date in the fall of the occurrence of temperatures as cold, or colder, than 36, 32, and 28 degrees Fahrenheit and the probable length of the freeze-free period relative to the same temperature threshold.

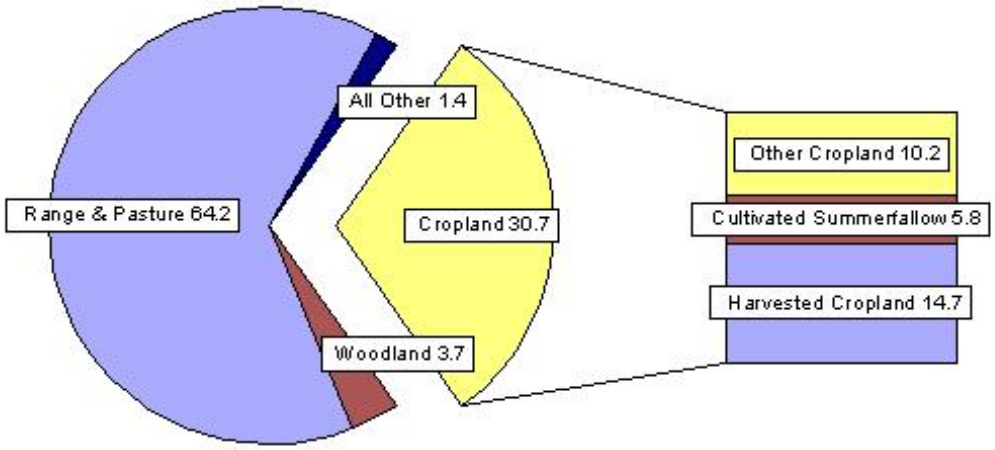
SOURCE: National Weather Service, NOAA, Great Falls, Montana.

Montana Facts and Figures

Montana Population		Land and Land Utilization 1/	
Total, 2000 Census People Per Sq. Mile	902,195 6.2	Montana Total Land Area	145,552 Sq. Miles 93,153,553 Acres
Farm Population People Per Farm	45,718 1.9	All Land in Farms & Ranches Proportion of Land in Farms & Ranches	59,612,403 Acres 64.0 Percent
1/ Source: 2002 U.S. Census of Agriculture			

Farms Counts and Measurements, 2003			
Number of Farms & Ranches 1/ Average Size of Farm or Rancn	28,000 2,146 Acres	Real Estate Value/Farm or Ranch Average Value per Acre 3/	$773,071 $410
Total Farm & Ranch Assets 2/ Average Value Per Farm or Ranch	$27.2 Bil. $969,990	Farm & Ranch Debt per Operation	$103,560
1/ Places with annual sales of agricultural products of $1,000 or more. 2/ Exclude farm operators' household assets and debt. 3/ Per acre, land and buildings, January 1, 2004. Source: Economic Indicators of the Farm Sector, State Income and Balance Sheet Statistics, USDA – ERS.			

Land in Farms & Ranches: Utilization as a Percentage of Total



Source: 2002 Census of Agriculture

Number of Farms

Year	Number of Farms (000)	Year	Number of Farms (000)	Year	Number of Farms (000)	Year	Number of Farms (000)
1910	28.8	1920	57.7	1930	55.0	1940	44.5
1911	31.5	1921	57.0	1931	54.5	1941	42.0
1912	34.0	1922	55.0	1932	54.0	1942	41.0
1913	37.0	1923	52.5	1933	53.5	1943	40.8
1914	40.0	1924	51.0	1934	53.0	1944	40.6
1915	45.0	1925	50.0	1935	52.0	1945	40.4
1916	50.0	1926	51.0	1936	50.0	1946	39.8
1917	54.0	1927	52.5	1937	48.0	1947	39.2
1918	56.0	1928	53.5	1938	46.0	1948	38.5
1919	57.0	1929	54.0	1939	45.0	1949	37.8

Number of Farms, All Land in Farms, and Average Size of Farms

Year 1/	Number of Farms (000)	All Land in Farms (000) Acres	Average Size of All Farms Acres	Year	Number of Farms (000)	All Land in Farms (000) Acres	Average Size of All Farms Acres
1950	37.2	65,000	1,747	1980	23.8	61,900	2,601
1951	36.8	65,200	1,772	1981	23.9	61,700	2,582
1952	36.4	65,500	1,799	1982	24.0	61,500	2,563
1953	35.9	65,800	1,833	1983	24.1	61,300	2,544
1954	35.4	66,100	1,867	1984	24.2	61,100	2,525
1955	34.8	66,100	1,899	1985	24.3	61,000	2,510
1956	34.2	66,200	1,936	1986	24.4	60,900	2,496
1957	33.6	66,300	1,973	1987	24.5	60,800	2,482
1958	33.0	66,500	2,015	1988	24.6	60,700	2,467
1959	32.4	66,600	2,056	1989	24.7	60,600	2,453
1960	31.7	66,700	2,104	1990	24.7	60,500	2,449
1961	30.8	66,800	2,169	1991	24.7	60,300	2,441
1962	30.1	66,800	2,219	1992	24.3	60,000	2,469
1963	29.5	66,800	2,264	1993	25.0	59,900	2,396
1964	28.9	67,200	2,325	1994	26.0	59,600	2,292
1965	28.4	66,700	2,349	1995	26.0	59,400	2,285
1966	28.0	66,200	2,364	1996	26.5	58,500	2,208
1967	27.6	65,700	2,380	1997	27.0	57,800	2,141
1968	27.1	65,200	2,406	1998	27.5	59,000	2,145
1969	26.7	64,700	2,423	1999	27.8	59,200	2,129
1970	26.4	64,200	2,432	2000	27.8	59,300	2,133
1971	26.0	63,700	2,450	2001	27.8	59,600	2,144
1972	25.5	63,200	2,478	2002	27.9	59,800	2,143
1973	25.1	63,000	2,510	2003	28.0	60,100	2,146
1974	24.6	62,800	2,553	2004	28.0	60,100	2,146
1975	23.4	62,200	2,658				
1976	23.4	62,200	2,658				
1977	23.5	62,100	2,643				
1978	23.6	62,100	2,631				
1979	23.7	62,100	2,620				

1/ Beginning in 1975, number of farms refers to places that had annual sales of agricultural products of $1,000 or more.

Census of Agriculture Number of Farms by Size

Year	1-9	10-49	50-179	180-499	500-999	1,000-1,999	2,000 or More	Total Farms
	Acres							
1954	1455	1893	4800	5952	5553	1/	13,408	33,061
1959	675	1,690	3,804	4,938	4,671	1/	13,181	28,959
1964	704	1,641	3,393	4,396	3,954	5,101	7,831	27,020
1969	1,283	1,485	2,791	3,757	3,339	4,700	7,596	24,951
1974	1,177	1,550	2,707	3,436	2,990	4,053	7,411	23,324
1978	1,255	1,889	2,987	3,420	2,928	4,011	7,075	23,565
1982	1,551	2,673	3,080	3,097	2,640	3,345	7,184	23,570
1987	1,940	2,745	3,019	3,315	2,737	3,460	7,352	24,568
1992	1,209	2,804	3,061	2,964	2,521	3,040	7,222	27,821
1997	1,195	4,673	4,414	4,032	3,067	3,382	6,869	27,632
2002	1,484	5,005	4,497	3,964	2,770	3,034	7,116	27,870

1/ Combined with “2,000 acres or more”.

Census of Agriculture Number of Farms by Value of Sales

Year	Less than $2,500	$2,500-$4,999	$5,000-$9,999	$10,000-$24,000	$25,000-$49,999	$50,000-$99,999	$100,000-$499.999	$500,000 or More	Total Farms
1954	9,654	600	7,760	3,905	2,581	--	--	--	33,061
1959	6,469	4,024	6,570	11,691	--	--	--	--	28,959
1964	5,886	3,522	6,518	1/	11,753	1/	251	2/	27,020
1969	4,525	2,375	3,800	1/	13,512	1/	597	49	24,951
1974	3,340	1,655	2,520	1/	13,565	1/	2,036	106	23,324
1978	2,842	1,991	2,538	4,573	4,757	1/	2,567	160	23,565
1982	3,914	1,795	2,295	3,703	3,592	3,928	3,981	263	23,570
1987	4,320	2,006	2,374	3,912	3,695	4,064	3,945	252	24,568
1992	4,073	1,764	2,131	3,413	3,051	3,528	4,492	369	27,821
1997	7,129	2,314	2,559	3,666	3,066	3,425	4,988	485	27,632
2002	10,117	1,776	2,162	3,043	2,718	3,027	4,507	520	27,870

1/ Combined with “$25,000-$49,999”.
2/ Combined with “$100,000-$499,999”.

Census of Agriculture Number of Farms Reporting Cropland

Year	Farms Reporting Cropland	Acres of Cropland	Cropland Acres Average Size
1954	31,200	14,508,000	465
1959	27,500	15,078,000	549
1964	25,200	15,388,000	611
1969	22,700	16,109,000	710
1974	21,400	15,446,000	723
1978	21,400	16,233,000	757
1982	20,700	16,452,000	794
1987	21,100	17,830,000	846
1992	19,400	17,495,000	900
1997	22,800	18,238,000	800
2002	21,900	18,316,000	838

Census Number of Farms, Land in Farms, and Average Farm Size, 1997 and 2002 1/

County and District	1997			2002		
	Number of Farms	Land in Farms - Acres	Average Farm Size - Acres	Number of Farms	Land in Farms - Acres	Average Farm Size - Acres
Deer Lodge	102	106,994	1,049	109	134,997	1,239
Flathead	1,102	237,781	216	1,075	234,861	218
Granite	130	260,070	2,001	140	282,907	2,021
Lake	1,216	617,435	508	1,185	601,544	508
Lincoln	310	53,101	171	310	54,236	175
Mineral	89	19,707	221	85	16,277	191
Missoula	608	269,357	443	641	258,315	403
Powell	261	633,641	2,428	274	618,687	2,258
Ravalli	1,318	198,386	151	1,441	245,133	170
Sanders	489	407,654	834	464	345,775	745
NORTHWEST	**5,625**	**2,804,126**	**499**	**5,724**	**2,792,732**	**488**
Blaine	598	2,224,905	3,721	588	2,261,411	3,846
Chouteau	819	2,247,664	2,744	787	2,301,376	2,924
Glacier	493	1,623,535	3,293	472	1,645,201	3,486
Hill	791	1,702,269	2,152	836	1,808,835	2,164
Liberty	303	932,582	3,078	297	905,171	3,048
Phillips	534	1,931,969	3,618	525	1,896,941	3,613
Pondera	536	912,659	1,703	520	900,107	1,731
Teton	625	1,129,786	1,808	700	1,230,550	1,758
Toole	424	1,098,048	2,590	405	1,087,797	2,686
NORTH CENTRAL	**5,123**	**13,803,417**	**2,694**	**5,130**	**14,037,389**	**2,736**
Daniels	405	807,146	1,993	364	815,443	2,240
Dawson	538	1,383,887	2,572	522	1,410,885	2,703
Garfield	241	2,077,981	8,622	268	2,181,755	8,141
McCone	466	1,325,778	2,845	496	1,346,271	2,714
Richland	611	1,197,842	1,960	587	1,201,436	2,047
Roosevelt	694	1,468,884	2,117	683	1,441,479	2,111
Sheridan	645	1,040,802	1,614	626	1,046,892	1,672
Valley	722	1,787,319	2,476	743	2,051,667	2,761
NORTHEAST	**4,322**	**11,089,639**	**2,566**	**4,289**	**11,495,828**	**2,680**
Broadwater	250	455,946	1,824	279	469,782	1,684
Cascade	1,050	1,470,308	1,400	1,037	1,388,530	1,339
Fergus	893	2,229,507	2,497	830	2,281,789	2,749
Golden Valley	125	632,799	5,062	140	660,787	4,720
Judith Basin	359	827,752	2,306	316	829,846	2,626
Lewis & Clark	610	832,589	1,365	635	841,826	1,326
Meagher	151	923,090	6,113	136	857,215	6,303
Musselshell	257	916,317	3,565	319	1,033,572	3,240
Petroleum	89	528,700	5,940	89	538,028	6,045
Wheatland	158	829,044	5,247	163	841,643	5,163
CENTRAL	**3,942**	**9,646,052**	**2,447**	**3,944**	**9,743,018**	**2,470**
Beaverhead	409	1,170,447	2,862	421	1,279,031	3,038
Gallatin	1,003	782,189	780	1,074	708,728	660
Jefferson	317	362,583	1,144	372	387,077	1,041
Madison	535	1,096,286	2,049	513	1,028,781	2,005
Silver Bow	145	103,374	713	155	73,792	476
Southwest	2,409	3,514,879	1,459	2,535	3,477,409	1,372
Big Horn	586	2,715,199	4,633	584	2,811,337	4,814
Carbon	719	764,729	1,064	703	753,504	1,072
Park	483	735,544	1,523	527	847,067	1,607
Stillwater	534	890,378	1,667	552	890,326	1,613
Sweetgrass	340	837,768	2,464	357	867,058	2,429
Treasure	119	593,985	4,991	115	606,846	5,277
Yellowstone	1,283	1,496,691	1,167	1,279	1,568,637	1,226
SOUTH CENTRAL	**4,064**	**8,034,294**	**1,977**	**4,117**	**8,344,775**	**2,027**
Carter	312	1,554,031	4,981	289	1,666,922	5,768
Custer	451	1,872,660	4,152	425	1,904,133	4,480
Fallon	326	900,413	2,762	327	932,211	2,851
Powder River	307	1,524,243	4,965	301	1,521,618	5,055
Prairie	162	596,205	3,680	162	619,684	3,825
Rosebud	397	2,636,032	6,640	412	2,540,898	6,167
Wibaux	192	469,348	2,445	215	535,786	2,492
SOUTHEAST	**2,147**	**9,552,932**	**4,449**	**2,131**	**9,721,252**	**4,562**
MONTANA	**27,632**	**58,445,339**	**2,115**	**27,870**	**59,612,403**	**2,139**

1/ Farms are places that had or would have had annual sales of agricultural products of $1,000 or more.